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REMARKS

Claims 1 through 16 are pending in the application.

Claim 4 has been amended to bring it into conformance with United States practice.

Reexamination and reconsideration of this application, withdrawal of all objections and rejections, and formal notification of the allowability of the claims as now presented are earnestly solicited in light of the remarks which follow.

Submission of Terminal Disclaimers

Claims 1 through 16 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over co-pending Application Nos. 09/791,447, or 10/296,037, or 10/311,732, or 10/275,827, in view of UK Patent Application GB 2344596 (GB 596) or United States Patent No. 3,950,301 to Balog et al.(US 301).

Claims 1 through 16 also stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over United States Patent Nos. 6,627,695 or 6,635,340 in view of GB 596 or US 301, and further in view of United States Patent No. 5,955,181.

Solely to advance prosecution of the case and without addressing the merits of the rejection, Applicants respectfully submit herewith terminal disclaimers to co-pending Application Nos. 09/791,447; 10/296,037; 10/311,732; and 10/275,827; and United States Patent Nos. 6,627,695 and 6,635,340. More particularly, Applicants submit herewith terminal disclaimers disclaiming the terminal part of any patents granted on the above-identified applications extending beyond the expiration date of the full statutory term which may ultimately result from co-pending Application Nos. 09/791,447; 10/296,037; 10/311,732; and 10/275,827; and United States Patent Nos. 6,627,695 and 6,635,340.

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The Claimed Invention Is Patentable in Light of the Art of Record

Claims 1 through 16 also stand rejected under the judicially created doctrine of obviousness-type double patenting over the claims of United States Patent No. 6,641,924 (US 924) in view of in view of GB 596 or US 301.

Applicants respectfully submit that the claimed invention is patentable in light of the art of record. The claims recite white, biaxially oriented polyester film comprising from 8 to 10% by weight of a cyclo olefin copolymer (COC), where the glass transition temperature of the COC is within the range of greater than 110 to 270 °C. In addition to COC, the layer comprises at least one UV stabilizer and a flame retardant. At least the flame retardant is incorporated as a predried, precrystallized masterbatch. The claimed films further comprise 10 to 70% by weight of regrind formed from the recited flame-retardant and UV-resistant polyester film.

The recited films provide a heretofore unknown and highly advantageous balance of properties, i.e. whiteness, UV resistance, flame retardance and recyclability. Quite unexpectedly, Applicants have found that white polyester films, particularly the recited white films incorporating multiple additives providing a range of functionality, may be readily recycled back into film production. The ability to recycle films containing the recited 8 to 10 wt % COC along with UV stabilizer and flame retardants would not have been expected. The ability to recycle such films in amounts of up to 70 wt % is especially surprising.

The minimal color impact imparted by the recycled films is altogether unexpected because the claimed films include both UV stabilizer and flame retardant, each of which would be expected to detrimentally impact the yellowness values of recycled films. In fact, films containing conventional UV stabilizers can be so sensitive that they impart yellowing immediately after production (versus upon recycling), as noted in the Application as filed.

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In addition to its recyclability, Applicants have also found that the recited films provide advantageous processing benefits. More specifically, Applicants have determined that the recited predried, precrystallized masterbatched flame retardants provide processing benefits. Conventional flame retardants can cake upon drying, making it difficult to produce film. Applicants have found that predrying and precrystallizing masterbatched flame retardants reduces caking in the dryer. The recited predried and precrystallized masterbatched flame retardants have further been determined to reduce embrittlement upon exposure to high heat and to improve the folding properties of the resulting film.

Applicants thus respectfully submit that the recited white, flame-retardant, UV-resistant polyester films of the invention provide a heretofore unknown balance of beneficial properties, and that the claimed invention is patentable in light of the art of record.

US 924 is merely directed to polyester films incorporating COC. The films of US 924 may contain up to 60 % by weight COC. (Col. 3, lines 5 – 10). In particularly preferable embodiments, the films of US 924 include from 6 to 40 % by weight COC. (Col. 5, lines 38 – 40).

As noted by the Examiner, US 924 does not teach or suggest either UV stabilizer or flame retardant. US 924 generally discloses COC in amounts of up to 60 wt %, with the preferable inclusion of COC in amounts of up to 40 % by weight. Accordingly, US 924 does not teach or suggest the recited polyester films including from 8 to 10 % by weight COC, UV stabilizer and flame retardant, that may be recycled in amounts ranging from 10 to 70 % by weight. And, as US 924 does not teach or suggest flame retardant, it most certainly does not teach or suggest the recited predried, precrystallized flame retardant masterbatches. Nor does US 924 teach or suggest films incorporating UV stabilizer in an amount from 0.01 to 5.0% by weight and flame retardant in an amount of from 0.5 to 30% by weight, as recited in Claim 4.

The secondary references do not cure the deficiencies within US 924.

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GB 596 is generally directed to flame retardant, UV resistant films used to protect metal surfaces. (Page 2, lines 31 - 32). The films of GB 596 are advantageously used to protect painted metal surfaces. (Page 3, lines 14 - 16). GB 596 is preferably directed to clear films having a matt appearance, e.g. having a gloss value of less than 60 %. (Page 2, lines 10 - 15 and Page 7, lines 25 - 30). GB '596 incorporates up to 45 wt % flame retardant and up to 10 wt % UV stabilizer into the polyester films. (Page 17, Claims 5 and 6 and Page 7, lines 15 - 16). GB 596 briefly notes the use of masterbatches. (Page 9, lines 3 - 4).

Accordingly, GB 596 does not teach or suggest the claimed invention, considered either alone or in combination with the art of record. GB 596 does not teach or suggest the recyclability of its films. GB 596 thus most certainly does not teach or suggest the recited polyester films including from 8 to 10 % by weight COC, UV stabilizer and flame retardant, that may be recycled in amounts ranging from 10 to 70 % by weight. And GB 596 also does not teach or suggest the recited predried, precrystallized flame retardant masterbatches. Nor does GB 596 teach or suggest films incorporating UV stabilizer in an amount from 0.01 to 5.0% by weight and flame retardant in an amount of from 0.5 to 30% by weight, as recited in Claim 4. GB 596 also does not teach or suggest films exhibiting a gloss above 80, as recited in Claim 16. In fact, GB 596 teaches away from such embodiments.

US 301 is primarily directed to reinforced resins used in injection molding. (Col. 12, lines 62 - 65 and Col. 6, lines 30 - 31). The polyester resins of US 301 incorporate a particular type of UV stabilizer. (Col. 1, lines 57 - 69). The resins of US 301 incorporate up to 50 wt % flame retardant. (Col. 8, lines 1 - 8). In contrast to the opinion urged in the Office Action, US 301 merely briefly notes the predrying of separate components, but does not teach or suggest masterbatched materials. (Col. 12, lines 45 - 50).

Applicants respectfully submit that US 301 similarly does not teach or suggest the claimed invention, considered either alone or in combination with the art of record. US 301 does not teach or suggest films, much less the recyclability of films. US 301 thus most certainly does not teach or

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suggest the recited polyester films including from 8 to 10 % by weight COC, UV stabilizer and flame retardant, that may be recycled in amounts ranging from 10 to 70 % by weight. Further, US 301 does not teach or suggest the recited predried or precrystallized flame retardant masterbatches. Nor does US 301 teach or suggest films incorporating UV stabilizer in an amount of from 0.01 to 5.0% by weight and flame retardant in an amount of from 0.5 to 30% by weight, as recited in Claim 4.

Applicants respectfully submit that there would have been no motivation to have combined the cited references. Applicants respectfully reiterate that merely because the references can be combined is not enough, there must still be a suggestion. MPEP 2143.01 (section citing Mills). US 924 is primarily directed to packaging films used in conjunction with light sensitive foods or other consumable items. GB 596 is generally directed to matt films used to protect painted metal surfaces. US 301 is directed to reinforced resins used in injection molding. These are altogether different fields of endeavor.

However, even if combined (which Applicants submit should not be done), the present invention would not result. US 924 teaches the use of 60 % by weight COC. GB 596 does not teach or suggest white films. In fact, GB 596, used to protect painted metal surfaces, would teach away from such colored films. US 301, directed to reinforced resins, does not teach or suggest films. Accordingly, the combination of references does not teach or suggest the recited white polyester films including from 8 to 10 % by weight COC, UV stabilizer and flame retardant, that may be recycled in amounts ranging from 10 to 70 % by weight. And the combination of references most certainly does not teach or suggest the recited predried, precrystallized flame retardant masterbatches. Nor does the combination teach or such suggest such films incorporating UV stabilizer in an amount of from 0.01 to 5.0 % by weight and flame retardant in an amount of from 0.5 to 30 % by weight, as recited in Claim 4.

Accordingly, Applicants respectfully submit that the claimed invention is patentable in light of the art of record, considered either alone or in combination.

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CONCLUSION

It is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that all of pending Claims 1 through 16 are now in condition for immediate allowance. It is requested that the Examiner telephone the undersigned if any questions remain to expedite examination of this application.

It is not believed that fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional fees are necessary to allow consideration of this paper, the fees are hereby authorized to be charged to Deposit Account No. 50-2193.

Respectfully submitted,

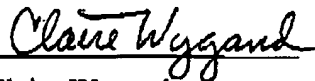


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